

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

PULMONETIC SYSTEMS, INC.,)	
)	
Plaintiff,)	
)	C.A. No. _____
v.)	
)	
VERSAMED MEDICAL SYSTEMS, INC.,)	
)	
Defendant.)	
)	

PLAINTIFF'S COMPLAINT AND DEMAND FOR JURY TRIAL

Plaintiff, Pulmonetic Systems, Inc. ("Pulmonetic"), for and as its complaint in this patent infringement action, alleges and avers against Defendant, VersaMed Medical Systems, Inc. ("VersaMed"), and hereby makes a jury demand, as follows:

NATURE OF THE ACTION

1. This claim for patent infringement arises under the laws of the United States of America, 35 U.S.C. §§ 100, *et seq.*
2. This claim for patent infringement relates to exhalation valves for mechanical ventilators.
3. By making, using, selling and/or offering to sell ventilators that infringe Pulmonetic's patent rights, VersaMed is depriving Pulmonetic of the exclusive right to use and profit from its inventions.

PARTIES

4. Pulmonetic is a Delaware corporation having its headquarters at 17400 Medina Road, #100, Plymouth, Minnesota 55447. Pulmonetic designs, manufactures and markets innovative products for respiratory care, including ventilators and accessories.

5. Upon information and belief, VersaMed is a Delaware corporation with its headquarters and principal place of business at 2 Blue Hill Plaza, Pearl River, New York 10965.

6. On information and belief, VersaMed regularly conducts and transacts business in Delaware, and throughout the United States and through one or more subsidiaries or affiliates, and as set forth in paragraphs 10 through 17 below, has committed, and continues to commit, tortious acts of patent infringement within and outside of Delaware.

JURISDICTION AND VENUE

7. This Court has original jurisdiction over the subject matter of this action under 35 U.S.C. § 271 and 28 U.S.C. §§ 1331 and 1338(a).

8. VersaMed is subject to personal jurisdiction in this Court because, *inter alia*, and upon information and belief, VersaMed is a Delaware corporation and VersaMed directly and through agents: regularly does, solicits and transacts business in the Delaware, including business with respect to the products that are the subject of this action.

9. Venue is proper in this district under 28 U.S.C. §§ 1391(b) and (c) and 1400 (b) because a substantial part of the events or omissions giving rise to the claims occurred in this district, or a substantial part of the property that is the subject of the action is situated in this district, or both, and because VersaMed is subject to personal jurisdiction in this Court.

BACKGROUND

10. United States Patent No. 6,102,038 (the “038 Patent”) was duly and lawfully issued by the United States Patent and Trademark Office on August 15, 2000 and is entitled

“Exhalation Valve For Mechanical Ventilator.” A copy of the ‘038 Patent is attached hereto as Exhibit A.

11. Pulmonetic is the exclusive assignee and owner of the ‘038 Patent, and holds all substantial rights thereunder, including the right to sue in its own name.

INFRINGEMENT BY VERSAMED

12. VersaMed, subsequent to September 4, 2005, has been making, offering for sale, selling, using and/or importing into the United States and otherwise making available products, systems and apparatuses that infringe the ‘038 Patent in connection with ventilator systems, devices or products, all without the authorization of Pulmonetic.

13. VersaMed, subsequent to September 4, 2005, has been performing, implementing and carrying out processes, methods or systems that infringe the ‘038 Patent, all without the authorization of Pulmonetic.

14. On information and belief, VersaMed, subsequent to September 4, 2005, has been actively inducing one or more third parties to infringe the ‘038 Patent, all without the authorization of Pulmonetic.

15. On information and belief, VersaMed has had both actual and constructive notice of the ‘038 Patent and of its infringement of the ‘038 Patent.

16. On information and belief, the acts of VersaMed set forth above have been willful, wanton and deliberate.

17. The harm to Pulmonetic resulting from the acts of VersaMed as set forth above is irreparable, ongoing, and not fully compensable in money damages, and it will continue unless VersaMed is enjoined by this Court.

FIRST CLAIM FOR RELIEF

(Patent Infringement)

18. Pulmonetic repeats, realleges, and incorporates by reference paragraph 1 through 17, inclusive, as though fully set forth herein.

19. The acts of VersaMed described above constitute infringement of the '038 Patent, including direct infringement, inducement of infringement and/or contributory infringement, in violation of 35 U.S.C. § 271, including § 271(a), § 271(b) and/or § 271(c).

20. Pulmonetic has been damaged by the acts of VersaMed, and the harm to Pulmonetic resulting from the acts of VersaMed as set forth above is irreparable, ongoing, and not fully compensable in money damages, and it will continue unless VersaMed is enjoined by this Court.

PRAYER FOR RELIEF

WHEREFORE, Pulmonetic respectfully requests the following relief:

- A. The entry of a judgment that VersaMed has infringed the '038 patent.
- B. The entry of a permanent injunction against VersaMed, and against all those acting in privity or concert with, or otherwise controlled by VersaMed, enjoining further infringement of the '038 patent.
- C. An award to Pulmonetic as compensation for its damages and injuries caused by VersaMed's acts subsequent to September 4, 2005.
- D. An adjudication that enhanced damages are appropriate and that accordingly, the damages awarded Pulmonetic, against VersaMed, be increased three (3) times pursuant to 35 U.S.C. § 284.
- E. An award of pre-judgment and post-judgment interest on any and all damages awarded to Pulmonetic.

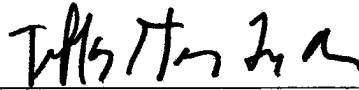
F. A judgment and declaration that this is an exceptional case within the meaning of 35 U.S.C. § 285, entitling Pulmonetic to an award of its reasonable attorneys' fees, expenses and costs in this action.

G. Such other and further relief in law or in equity as this Court deems just or proper.

DEMAND FOR JURY TRIAL

Plaintiff hereby respectfully requests a trial by jury for each and every issue so permitted by law and statute.

ASHBY & GEDDES



Steven J. Balick (I.D. #2114)
John G. Day (I.D. #2403)
Tiffany Geyer Lydon (I.D. #3950)
222 Delaware Avenue, 17th Floor
P.O. Box 1150
Wilmington, Delaware 19899
(302) 654-1888

Attorneys for Plaintiff

Of Counsel:

Jeffrey M. Olson, Esq.
Christopher P. Broderick, Esq.
SIDLEY AUSTIN LLP
555 West Fifth Street, Suite 4000
Los Angeles, CA 90013
(213) 896-6000

Dated: September 12, 2006
173098.1

EXHIBIT A



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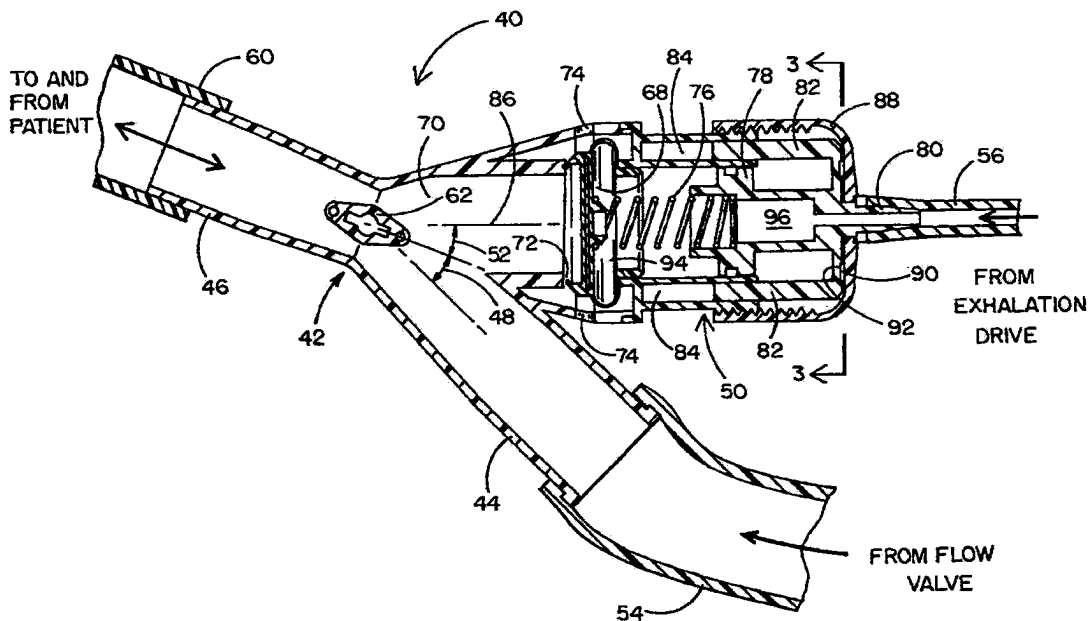
United States Patent [19]**DeVries**[11] **Patent Number:** **6,102,038**[45] **Date of Patent:** **Aug. 15, 2000**[54] **EXHALATION VALVE FOR MECHANICAL VENTILATOR**[75] **Inventor:** Douglas F. DeVries, Redlands, Calif.[73] **Assignee:** Pulmonetic Systems, Inc., Colton, Calif.[21] **Appl. No.:** 09/080,327[22] **Filed:** May 15, 1998[51] **Int. Cl.⁷** A62B 9/02[52] **U.S. Cl.** 128/205.24; 128/204.23[58] **Field of Search** 128/205.24, 204.18, 128/204.21, 204.23, 205.19; 137/908, 114, 102[56] **References Cited****U.S. PATENT DOCUMENTS**

5,694,922 12/1997 Palmer 128/202.27

5,740,796 4/1998 Skog 128/200.23
 5,752,506 5/1998 Richardson 128/204.18
 5,839,436 11/1998 Fangrow, Jr. et al. 128/205.24

Primary Examiner—Aaron J. Lewis*Assistant Examiner*—Teena Mitchell*Attorney, Agent, or Firm*—Klein & Szekeres, LLP[57] **ABSTRACT**

An exhalation valve assembly for use in the mechanical ventilation of respiratory patients in which the PEEP valve and the exhalation valve are combined into a single valve mechanism, and which includes a wye in which the patient tube splits at equal angles into the ventilator tube and a tube closed off by the PEEP valve, so as to maintain the exhalation drive hose and the ventilator hose generally parallel, and avoid sharp angles in the air flow.

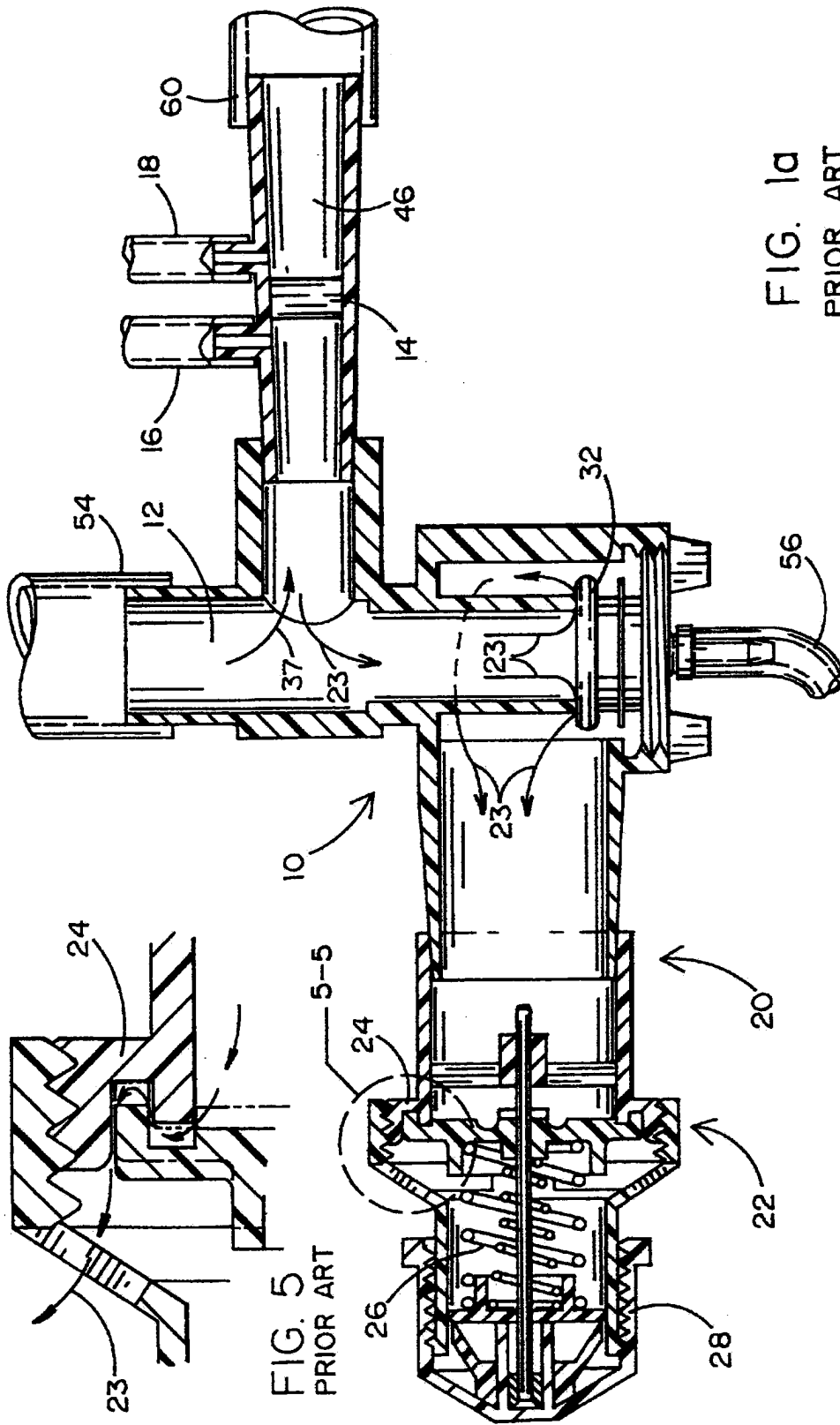
18 Claims, 4 Drawing Sheets

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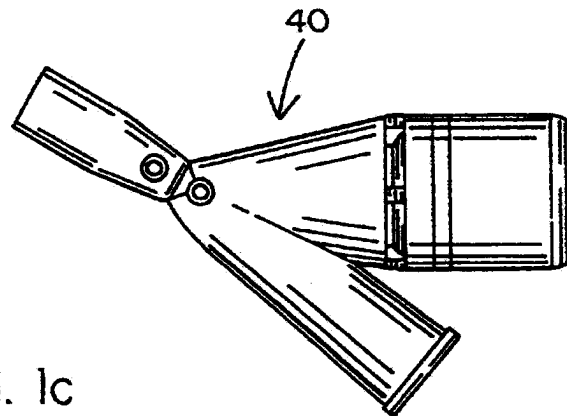
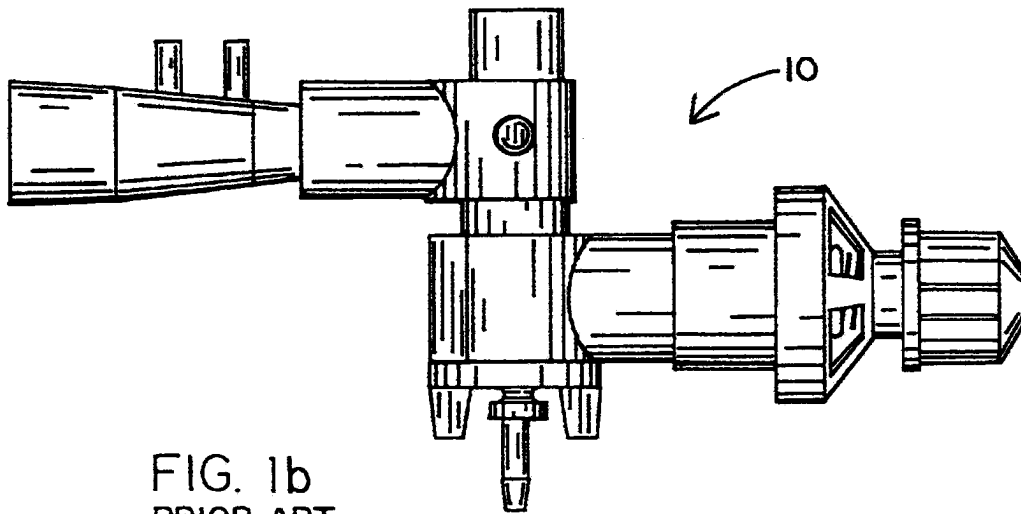


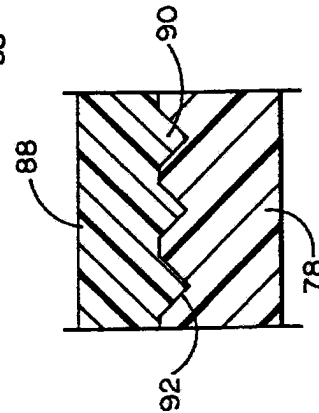
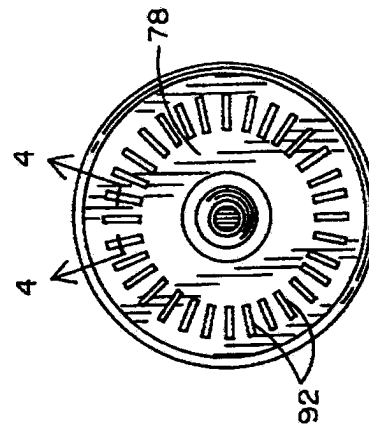
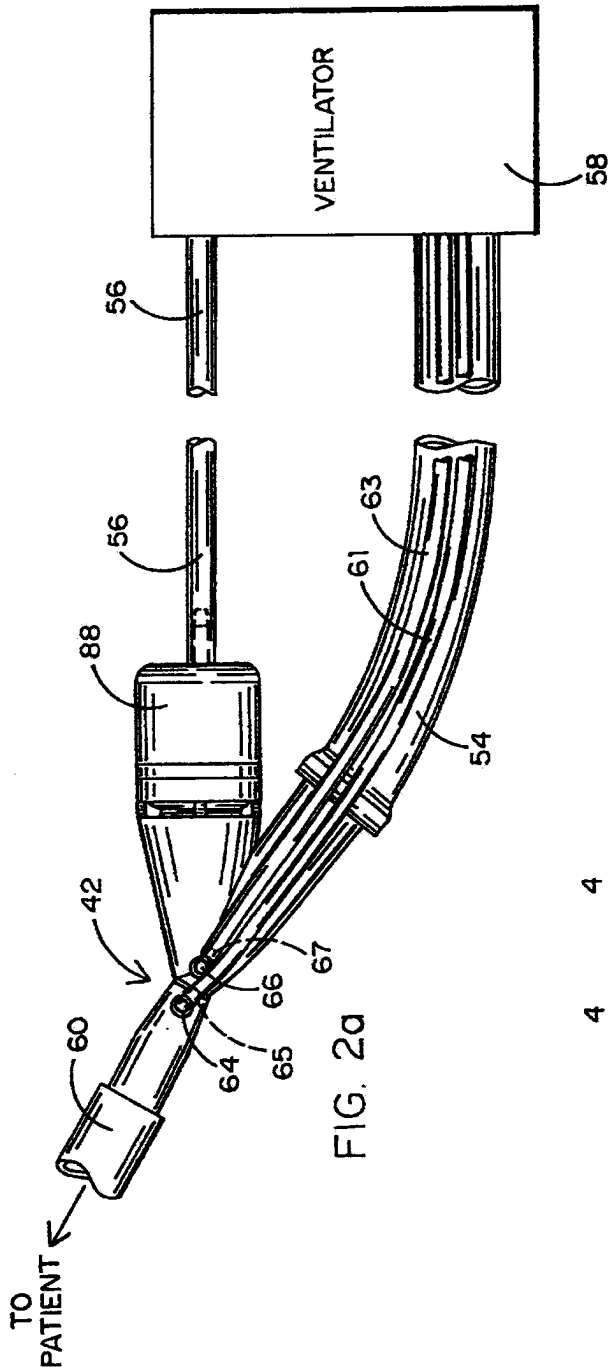
FIG. 1c

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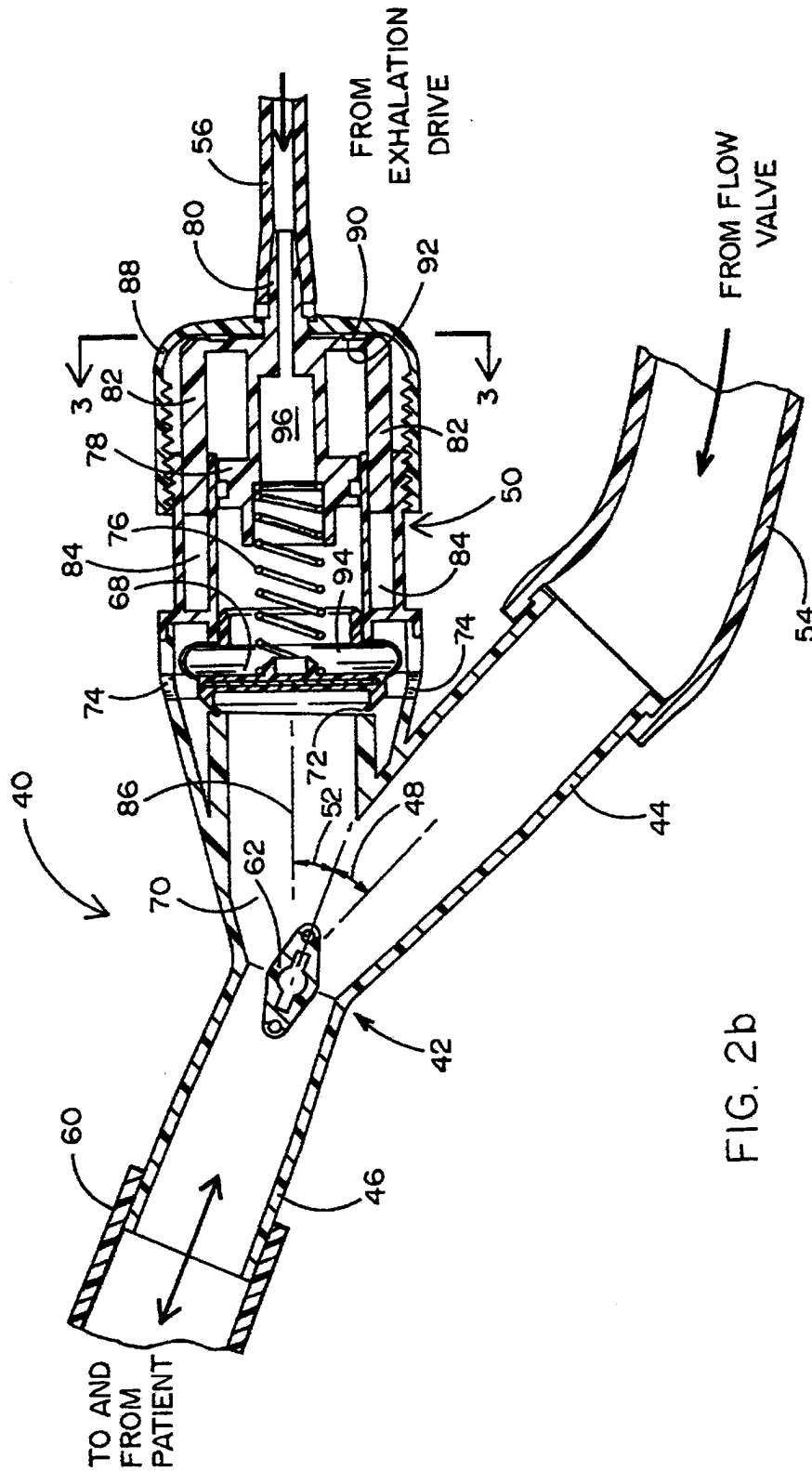


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EXHALATION VALVE FOR MECHANICAL VENTILATOR

FIELD OF THE INVENTION

This invention relates to exhalation valves for mechanical ventilators, and more particularly to a low-profile adjustable exhalation valve assembly in which the closing function and the exhalation pressure control are combined in a single mechanism.

BACKGROUND OF THE INVENTION

Mechanical or positive pressure ventilators conventionally allow the patient to exhale through an exhalation valve attached to the air supply conduit which connects the ventilator to the patient. This valve is closed during inspiration by compressed air from the ventilator's exhalation drive output, but opens during the exhalation phase to allow the patient to exhale to atmosphere. For medical reasons, it is sometimes advantageous to provide an elevated back pressure above atmosphere during exhalation, known as positive end expiratory pressure (PEEP). This pressure is conventionally provided by a separate PEEP valve located downstream from and attached to the exhalation valve.

Prior art exhalation valve assemblies have typically been relatively large, complex and heavy. Because the exhalation valve assembly is attached to the patient's breathing tube, which is in turn affixed to the patient's trachea, the weight and bulk of the exhalation valve assembly can at the least create patient discomfort, and at the worst can lead to extubation or tissue damage.

It is therefore desirable to minimize the bulk and complexity of the exhalation valve assembly as well as to improve its efficiency. In the prior art, the separation of the exhalation valve from the PEEP valve in the exhalation valve assembly resulted in several right-angle corners in the air flow path that impeded air flow through the valve assembly to some degree.

SUMMARY OF THE INVENTION

The present invention provides an exhalation valve assembly which greatly reduces the bulk, complexity and weight of the assembly by combining the closing function and the PEEP control into a single unit. The inventive assembly permits substantial alignment of the patient, ventilator and exhalation drive tubes so as to occupy a minimum of space. Unnecessary flow impedances in the valve assembly are removed by eliminating sharp flow corners and positioning the flow-restricting obstruction needed for the flow sensing mechanism of the ventilator in substantial alignment with both the combined exhalation/PEEP valve and the ventilator tube.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1a is a longitudinal section of a prior art exhalation valve assembly;

FIG. 1b is a side elevational view of the prior art valve assembly of FIG. 1a;

FIG. 1c is a side elevation of the inventive valve assembly drawn to the same scale as FIG. 1b;

FIG. 2a is an elevational view of the inventive exhalation valve assembly and its connections;

FIG. 2b is a longitudinal section of the inventive assembly;

FIG. 3 is a section along line 3—3 of FIG. 2b;

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FIG. 4 is a detail section along line 4—4 of FIG. 3; and
FIG. 5 is a detail section along line 5—5 of FIG. 1a.

DESCRIPTION OF THE PREFERRED EMBODIMENT

FIG. 1a shows a conventional prior art exhalation valve assembly 10. During inspiration, breathing gas flows from the ventilator 58 (FIG. 2a) through a ventilator tube 54, enters the exhalation valve assembly through port 12 connected to the ventilator tube 54, and flows into flow transducer tube 46 disposed at a right angle thereto. In the flow transducer tube 46, a flow restrictor 14 provides a sufficient pressure drop to cause a measurable pressure difference between the pressure sensor tube connections 16, 18. This pressure difference is used by the ventilator to measure air flow to and from the patient.

The PEEP valve assembly 20 extends at right angles to the port 12 and is offset from the flow transducer tube 46. The PEEP valve assembly 20 contains a valve element 22 which discharges exhaled air (arrows 23) in FIGS. 1a and 5 to atmosphere at 24 and operates against the adjustable bias of a spring 26. The bias of spring 26 can be adjusted by a screw cap 28. During inspiration, air flow into the PEEP valve assembly 20 is blocked by a separate balloon poppet exhalation valve 32 operated by air pressure from the exhalation drive of the ventilator transmitted through exhalation drive hose 56. Because the exhalation valve 32 extends at a right angle to the tube 46, the exhalation drive hose 56 and the ventilator hose 54 and flow sensor hoses 34, 36 extend substantially transversely to the tube 46 in opposite directions, which is awkward. Also, the two sharp angles between the tube 46 and the PEEP valve assembly 20 causes eddies which create resistance to flow thereby making both inspiration (flow arrow 37) and exhalation more difficult.

The above-described prior art structure results in a relatively large and awkwardly shaped device, as is shown by the comparison FIGS. 1b and 1c which show, respectively, the prior art assembly 10 and the inventive assembly 40 drawn to the same scale.

FIGS. 2a and 2b show the inventive valve assembly 40. In the valve assembly 40, both the inspiration and exhalation air flow through a wye 42 in which the ventilator tube 44 extends at an angle 48 of about 22.5° to the flow transducer tube 46. On the opposite side of the axis of the flow transducer tube 46, the combined exhalation and PEEP valve assembly 50 extends at a like angle 52 of about 22.5° to the patient tube 46.

With the angle between the axes of ventilator tube 44 and combined exhalation and PEEP valve assembly 50 being thus about 45°, it will be seen in FIGS. 2a and 2b that the ventilator hose 54 and the exhalation drive hose 56 can be easily brought into close parallelism with each other on their way to the ventilator 58. Also, the hoses 54 and 56 will be in substantial alignment with the patient hose 60. The thin sensor hoses 61, 63 extending from the sensor fittings 64, 66 are easily oriented by elbow fittings 65, 67 to parallel the hoses 54, 56.

Referring now in more detail to FIG. 2b, a flow restrictor 62 is positioned at the throat of the wye 42. The flow restrictor 62 is elongated in the direction of the axis of the flow transducer tube 46 so as to pose the same obstruction to air flow toward the patient from ventilator tube 44 as to air flow from the patient into valve assembly 50. The sensor fittings 64, 66 (FIG. 2a) are mounted in the restrictor 62 on the axis of flow transducer tube 46.

The combined exhalation and PEEP valve assembly 50 itself combines the control and closing function into a single

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mechanism. The combined exhalation and PEEP valve assembly 50 includes a mushroom or balloon diaphragm exhalation valve 68 which, when open, allows air from conduit 70 to escape to atmosphere through annulus 72 and slots 74. The valve 68 is biased into the closed position by a spring 76 which is held in a movable seat 78. The seat 78 is formed integrally with the connector 80 for the exhalation drive hose 56. Also integrally formed with the spring seat 78 are guide arms 82 which slide axially in channels 84 but are held against rotation about the axis 86 by the channels 84.

A cap 88 screwthreadedly engages the outside of channels 84 and can be moved axially of the combined exhalation and PEEP valve assembly 50 by rotary movement about the axis 86. Accidental movement of the cap 88 is prevented by teeth 90 (FIG. 4) on the inside of the cap 88 which engage complementary radial grooves 92 on the upper surface of spring seat 78. Thus, the spring bias of the PEEP function (and thereby the positive end exhalation pressure seen by the patient) can be adjusted as necessary.

In accordance with the invention, the PEEP control valve 68 serves also as the exhalation closing function. This is accomplished by exposing the chamber 94 of valve 68 to air pressure from the exhalation drive through hose 56 and passage 96. When the exhalation drive of the ventilator 58 pressurizes the chamber 94, the valve 68 of FIG. 2b is closed and can be opened neither by exhalation nor by the pressure of the inspiration flow.

It is understood that the exemplary exhalation valve assembly for mechanical ventilators described herein and shown in the drawings represents only a presently preferred embodiment of the invention. Indeed, various modifications and additions may be made to such embodiment without departing from the spirit and scope of the invention. Thus, other modifications and additions may be obvious to those skilled in the art and may be implemented to adapt the present invention for use in a variety of different applications.

What is claimed is:

1. An exhalation valve assembly for a mechanically ventilated patient, comprising:

- a) a first conduit having a first end configured for connection to a patient, and a second end;
- b) a second conduit having a first end configured for connection to a ventilator, and a second end in fluid communication with the second end of the first conduit;
- c) a third conduit having a first end in fluid communication with the first and second conduits, and a second end openable to atmosphere;
- d) a valve located adjacent the second end of the third conduit and biased in the closed position so as to controllably open the second end of the third conduit; and
- e) a fourth conduit substantially coaxial with the valve and said third conduit and configured for connection to a source of exhalation drive pressure for communicating the exhalation drive pressure to the valve;
- f) the valve comprising:
 - a spring engaged by a rotatable cap and an axially movable spring seat arranged to vary the bias of the spring by rotation of the cap; and
 - a chamber exposed to exhalation drive pressure from said fourth conduit and being arranged to lock the valve closed by the exhalation drive pressure.

2. The valve assembly of claim 1, in which each of said first, second, and third conduits has an axis, the axes of said second and third conduits being disposed at an acute angle on opposite sides of the axis of said first conduit.

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3. The valve assembly of claim 2, in which said angle is substantially 22.5°.

4. The valve assembly of claim 1, further comprising:

- h) a flow restrictor positioned in said first conduit at the junction thereof with said second and third conduits;
- i) said flow restrictor being elongated in a direction axial of said first conduit.

5. The valve assembly of claim 1, in which said axially movable spring seat is held against rotation about the axis of said third and fourth conduits.

6. An exhalation valve assembly for a mechanical ventilator that provides a flow of inspiratory gas to a patient during inspiration and that provides an exhalation drive pressure during inspiration, the exhalation valve assembly comprising:

- a) a first conduit having a first end configured to receive exhaled gas from a patient, and a second end;
- b) a second conduit having a first end configured to receive inspiratory gas from a mechanical ventilator, and a second end that is in fluid communication with the second end of the first conduit;
- c) a third conduit having a first end in fluid communication with the first and second conduits, a second end that is openable to atmosphere;
- d) a fourth conduit having a first end configured to receive the exhalation drive pressure during inspiration, and a second end; and
- e) a combined exhalation and PEEP valve located so as to control the flow of exhaled gas through the second end of the third conduit, the combined exhalation and PEEP valve comprising:

a valve element exposed to the exhalation drive pressure from the fourth conduit and biased toward a closed position against the second end of the third conduit so as to control the flow of exhaled gas therethrough, whereby the valve element is closed against the second end of the third conduit in response to the exhalation drive pressure; and means for adjusting the bias applied to the valve element.

7. The exhalation valve assembly of claim 6, wherein the fourth conduit is substantially coaxial with the third conduit.

8. The exhalation valve assembly of claim 6, wherein the valve element comprises a diaphragm having a first side disposed against the second end of the third conduit and a second side exposed to the exhalation drive pressure.

9. The exhalation valve assembly of claim 8, wherein the combined exhalation and PEEP valve further comprises a spring having a first end engaged against the second side of the diaphragm and a second end, and wherein the means for adjusting the bias comprises:

an axially-movable spring seat engaged against the second end of the spring; and

means for adjustably moving the spring seat axially.

10. The exhalation valve assembly of claim 9, wherein the means for adjustably moving the spring seat comprises a rotatable cap coupled to the spring seat for moving the spring seat axially in response to the rotation of the cap.

11. A device for conducting inspiratory gas from a mechanical ventilator to a patient, and for conducting exhaled gas from the patient, comprising:

- a) a first conduit having a first end configured to receive exhaled gas from a patient, a second end, and a first axis defined between the first and second ends of the first conduit;

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- b) a second conduit having a first end configured to receive inspiratory gas from a mechanical ventilator, a second end communicating with the second end of the first conduit, and a second axis defined between the first and second ends of the second conduit that defines an acute angle with the first axis on a first side of the first axis;
- c) a third conduit having a first end communicating with the second end of the first conduit and the second end of the second conduit, a second end that is openable to atmosphere, and a third axis defined between the first and second ends of the third conduit that defines an acute angle with the first axis on a second side of the first axis opposite the first side, whereby the second end of the second conduit and the first end of the third conduit are joined to the second end of the first conduit at a "Y"-shaped juncture; and
- d) a differential flow sensor element located at the "Y"-shaped juncture.

12. The device of claim 11, wherein the differential flow sensor element comprises a flow restrictor having an elongated dimension substantially aligned with the first axis.

13. The device of claim 12, wherein the flow restrictor has first and second ends, each end including means for the attachment of a sensor tube.

14. A combination exhalation and PEEP valve for a mechanical ventilator that provides a flow of inspiratory gas to a patient during inspiration and that provides an exhalation drive pressure during inspiration, the valve comprising:

- a first conduit configured to conduct exhaled gas from a patient during exhalation, the first conduit having an end openable to atmosphere;
- a valve element disposed adjacent the end of the first conduit;

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biasing means for biasing the valve element toward a closed position against the end of the first conduit so as to controllably open the end of the first conduit; and

- a second conduit substantially coaxial with the valve element and the first conduit and configured for communicating the exhalation drive pressure to the valve element.

15. The combination exhalation and PEEP valve of claim 14, wherein the valve element is closed against the open end of the first conduit in response to the exhalation drive pressure, and wherein the biasing means includes means for adjusting the bias applied to the valve element.

16. The combination exhalation and PEEP valve of claim 14, wherein the valve element comprises a diaphragm having a first side disposed against the open end of the first conduit and a second side exposed to the exhalation drive pressure.

17. The combination exhalation and PEEP valve of claim 16, wherein the biasing means comprises a spring having a first end engaged against the second side of the diaphragm and a second end, and wherein the means for adjusting the bias comprises:

- an axially-movable spring seat engaged against the second end of the spring; and
- means for adjustably moving the spring seat axially.

18. The combination exhalation and PEEP valve of claim 17, wherein the means for adjustably moving the spring seat comprises a rotatable cap coupled to the spring seat for moving the spring seat axially in response to the rotation of the cap.

* * * * *

JS 44 (Rev. 3/99)

CIVIL COVER SHEET

The JS-44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON THE REVERSE OF THE FORM.)

I. (a) PLAINTIFFS

PULMONETIC SYSTEMS, INC.

(b) County of Residence of First Listed Plaintiff *
(EXCEPT IN U.S. PLAINTIFF CASES)

* plaintiff is a Delaware corporation

(c) Attorney's (Firm Name, Address, and Telephone Number)

Tiffany Geyer Lydon (ID #3950)
Ashby & Geddes, 222 Delaware Avenue,
17th Floor, P.O. Box 1150, Wilmington,
Delaware, 19899, (302) 654-1888

DEFENDANTS

VERSAMED MEDICAL SYSTEMS, INC.

County of Residence of First Listed
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE
LAND INVOLVED.

Attorneys (If Known)

(unknown)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff ☒ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- Citizen of This State ☐ 1 ☐ 1 DEF Incorporated or Principal Place of Business In This State ☐ 4 ☐ 4 DEF
- Citizen of Another State ☐ 2 ☐ 2 DEF Incorporated and Principal Place of Business In Another State ☐ 5 ☐ 5 DEF
- Citizen or Subject of a Foreign Country ☐ 3 ☐ 3 DEF Foreign Nation ☐ 6 ☐ 6 DEF

IV. NATURE OF SUIT (Place an "X" in One Box Only)

CONTRACT	TORTS	FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES
<input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loans (Excl. Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability	PERSONAL INJURY <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Federal Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury	<input type="checkbox"/> 362 Personal Injury—Med. Malpractice <input type="checkbox"/> 365 Personal Injury—Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal Property Damage <input type="checkbox"/> 385 Property Damage Product Liability	<input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 PROPERTY RIGHTS <input type="checkbox"/> 820 Copyrights <input checked="" type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark	<input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce/ICC Rates/etc. <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 810 Selective Service <input type="checkbox"/> 850 Securities/Commodities/Exchange <input type="checkbox"/> 875 Customer Challenge 12 USC 3410 <input type="checkbox"/> 891 Agricultural Acts <input type="checkbox"/> 892 Economic Stabilization Act <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 894 Energy Allocation Act <input type="checkbox"/> 895 Freedom of Information Act <input type="checkbox"/> 900 Appeal of Fee Determination Under Equal Access to Justice <input type="checkbox"/> 950 Constitutionality of State Statutes <input type="checkbox"/> 890 Other Statutory Actions
REAL PROPERTY <input type="checkbox"/> 210 Land Condemnation <input type="checkbox"/> 220 Foreclosure <input type="checkbox"/> 230 Rent Lease & Ejectment <input type="checkbox"/> 240 Torts to Land <input type="checkbox"/> 245 Tort Product Liability <input type="checkbox"/> 290 All Other Real Property	CIVIL RIGHTS <input type="checkbox"/> 441 Voting <input type="checkbox"/> 442 Employment <input type="checkbox"/> 443 Housing/Accommodations <input type="checkbox"/> 444 Welfare <input type="checkbox"/> 440 Other Civil Rights	PRISONER PETITIONS <input type="checkbox"/> 510 Motions to Vacate Sentence <input type="checkbox"/> Habeas Corpus: <input type="checkbox"/> 530 General <input type="checkbox"/> 535 Death Penalty <input type="checkbox"/> 540 Mandamus & Other <input type="checkbox"/> 550 Civil Rights <input type="checkbox"/> 555 Prison Condition	LABOR <input type="checkbox"/> 610 Agriculture <input type="checkbox"/> 620 Other Food & Drug <input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC <input type="checkbox"/> 630 Liquor Laws <input type="checkbox"/> 640 R.R. & Truck <input type="checkbox"/> 650 Airline Regs. <input type="checkbox"/> 660 Occupational Safety/Health <input type="checkbox"/> 690 Other <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Mgmt. Relations <input type="checkbox"/> 730 Labor/Mgmt. Reporting & Disclosure Act <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Empl. Ret. Inc. Security Act	SOCIAL SECURITY <input type="checkbox"/> 861 HIA (1395ff) <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) FEDERAL TAX SUITS <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS—Third Party 26 USC 7609

V. ORIGIN

(PLACE AN "X" IN ONE BOX ONLY)

- ☒ 1 Original Proceeding ☐ 2 Removed from State Court ☐ 3 Remanded from Appellate Court ☐ 4 Reinstated or Reopened ☐ 5 Transferred from another district (specify) ☐ 6 Multidistrict Litigation ☐ 7 Appeal to District Judge from Magistrate Judgment

VI. CAUSE OF ACTION

(Cite the U.S. Civil Statute under which you are filing and write brief statement of cause.
Do not cite jurisdictional statutes unless diversity.)

Title 35, U.S. Code, this is an action arising under the patent laws of the United States.

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER F.R.C.P. 23

DEMAND \$

CHECK YES only if demanded in complaint:

JURY DEMAND: ☒ Yes ☐ No**VIII. RELATED CASE(S) IF ANY**

(See instructions)

JUDGE

DOCKET NUMBER

DATE

SIGNATURE OF ATTORNEY OF RECORD

September 12, 2006

Tiffany Geyer Lydon

FOR OFFICE USE ONLY

RECEIPT # AMOUNT APPLYING IFP JUDGE MAG. JUDGE

JS 44 Reverse (Rev. 12/96)

INSTRUCTIONS FOR ATTORNEYS COMPLETING CIVIL COVER SHEET FORM JS-44**Authority For Civil Cover Sheet**

The JS-44 civil cover sheet and the information contained herein neither replaces nor supplements the filings and service of pleading or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. Consequently, a civil cover sheet is submitted to the Clerk of Court for each civil complaint filed. The attorney filing a case should complete the form as follows:

I. (a) Plaintiffs-Defendants. Enter names (last, first, middle initial) of plaintiff and defendant. If the plaintiff or defendant is a government agency, use only the full name or standard abbreviations. If the plaintiff or defendant is an official within a government agency, identify first the agency and then the official, giving both name and title.

(b.) County of Residence. For each civil case filed, except U.S. plaintiff cases, enter the name of the county where the first listed plaintiff resides at the time of filing. In U.S. plaintiff cases, enter the name of the county in which the first listed defendant resides at the time of filing. (NOTE: In land condemnation cases, the county of residence of the "defendant" is the location of the tract of land involved.)

(c) Attorneys. Enter the firm name, address, telephone number, and attorney of record. If there are several attorneys, list them on an attachment, noting in this section "(see attachment)".

II. Jurisdiction. The basis of jurisdiction is set forth under Rule 8(a), F.R.C.P., which requires that jurisdictions be shown in pleadings. Place an "X" in one of the boxes. If there is more than one basis of jurisdiction, precedence is given in the order shown below.

United States plaintiff. (1) Jurisdiction based on 28 U.S.C. 1345 and 1348. Suits by agencies and officers of the United States, are included here.

United States defendant. (2) When the plaintiff is suing the United States, its officers or agencies, place an "X" in this box.

Federal question. (3) This refers to suits under 28 U.S.C. 1331, where jurisdiction arises under the Constitution of the United States, an amendment to the Constitution, an act of Congress or a treaty of the United States. In cases where the U.S. is a party, the U.S. plaintiff or defendant code takes precedence, and box 1 or 2 should be marked.

Diversity of citizenship. (4) This refers to suits under 28 U.S.C. 1332, where parties are citizens of different states. When Box 4 is checked, the citizenship of the different parties must be checked. (See Section III below; federal question actions take precedence over diversity cases.)

III. Residence (citizenship) of Principal Parties. This section of the JS-44 is to be completed if diversity of citizenship was indicated above. Mark this section for each principal party.

IV. Nature of Suit. Place an "X" in the appropriate box. If the nature of suit cannot be determined, be sure the cause of action, in Section IV below, is sufficient to enable the deputy clerk or the statistical clerks in the Administrative Office to determine the nature of suit. If the cause fits more than one nature of suit, select the most definitive.

V. Origin. Place an "X" in one of the seven boxes.

Original Proceedings. (1) Cases which originate in the United States district courts.

Removed from State Court. (2) Proceedings initiated in state courts may be removed to the district courts under Title 28 U.S.C., Section 1441. When the petition for removal is granted, check this box.

Remanded from Appellate Court. (3) Check this box for cases remanded to the district court for further action. Use the date of remand as the filing date.

Reinstated or Reopened. (4) Check this box for cases reinstated or reopened in the district court. Use the reopening date as the filing date.

Transferred from Another District. (5) For cases transferred under Title 28 U.S.C. Section 1404(a) Do not use this for within district transfers or multidistrict litigation transfers.

Multidistrict Litigation. (6) Check this box when a multidistrict case is transferred into the district under authority of Title 28 U.S.C. Section 1407. When this box is checked, do not check (5) above.

Appeal to District Judge from Magistrate Judgment. (7) Check this box for an appeal from a magistrate judge's decision.

VI. Cause of Action. Report the civil statute directly related to the cause of action and give a brief description of the cause.

VII. Requested in Complaint. Class Action. Place an "X" in this box if you are filing a class action under Rule 23, F.R.Cv.P.

Demand. In this space enter the dollar amount (in thousands of dollars) being demanded or indicate other demand such as a preliminary injunction.

Jury Demand. Check the appropriate box to indicate whether or not a jury is being demanded.

VIII. Related Cases. This section of the JS-44 is used to reference related pending cases if any. If there are related pending cases, insert the docket numbers and the corresponding judge names for such cases.

Date and Attorney Signature. Date and sign the civil cover sheet.

AO FORM 85 RECEIPT (REV. 9/04)

United States District Court for the District of Delaware

Civil Action No. 06-564-

ACKNOWLEDGMENT
OF RECEIPT FOR AO FORM 85

NOTICE OF AVAILABILITY OF A
UNITED STATES MAGISTRATE JUDGE
TO EXERCISE JURISDICTION

I HEREBY ACKNOWLEDGE RECEIPT OF 1 COPIES OF AO FORM 85.

9/12/06

(Date forms issued)

Shane Handlin

(Signature of Party or their Representative)

Shane Handlin

(Printed name of Party or their Representative)

Note: Completed receipt will be filed in the Civil Action